

Claim Amendments

1. (Previously amended) A method for preparing a catalyst comprising a zeolite and a low acidity refractory oxide binder which is essentially free of alumina comprising:

- (a) preparing an extrudable mass by first mixing a zeolite and an acid silica sol into a first homogeneous mixture having a pH below 7 and subsequently adding an amine compound to the first homogeneous mixture such that the pH of the resulting second mixture has a value of above 8,
- (b) extruding the extrudable mass resulting from step (a),
- (c) drying the extrudate resulting from step (b); and,
- (d) calcining the dried extrudate resulting from step (c) thereby providing said catalyst.

2. (Canceled)

3. (Previously amended) The method of claim 1 wherein the amine compound is added in step (a) within 20 minutes of performing step (b).

4. (Previously amended) The method of claim 3 wherein the zeolite content, on a dry basis, is below 50 wt% as calculated on the finished catalyst and wherein further included in said first homogenous mixture is a powder of a low acidity refractory oxide binder material.

5. (Previously amended) The method of claim 4 wherein the low acidity refractory oxide binder material is silica.

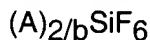
6. (Canceled)

7. (Previously amended) The method of claim 5 wherein the amine compound is ammonia.

8. (Previously amended) The method of claim 7 wherein the zeolite is selected from the group consisting of ZSM-5, ZSM-12, ZSM-22, ZSM-23, and SZZ-32.

9. (Original) The method wherein the catalyst produced by the method according to claim 1 is subjected to a dealumination treatment.

10. (Original) The method according to claim 9 wherein the dealumination treatment is performed by a process in which the zeolite is contacted with an aqueous solution of a fluorosilicate salt wherein the fluorosilicate salt is represented by the formula:



wherein A is a metallic or non-metallic cation other than H⁺ having the valence b.

11. (Original) The method wherein a catalyst prepared by the method of claim 1 is subjected to a cation exchange treatment wherein a palladium, platinum or nickel metal is loaded on the catalyst.

12. (Previously amended) A hydrocarbon conversion process comprising the step of contacting a hydrocarbon feedstock with the catalyst produced according to the method of claim 1.

13. (Original) The process of claim 12 wherein the process is a catalytic dewaxing process.

14. (Original) The process of claim 12 wherein the process is a xylene isomerization process.

15. (Canceled)

16. (Canceled)

17. (Previously added) A method, comprising:
mixing a zeolite and an acid silica sol and forming a first homogeneous mixture having a pH below 7; and

adding to said first homogeneous mixture an amine compound in an amount so as to provide a resulting second mixture having a pH above 8 thereby forming an extrudable mass.

18. (Previously added) A method as recited in claim 17 wherein in said mixing step water is further mixed with said zeolite and said acid silica sol such that said extrudable mass has a water content not exceeding 60 percent.

19. (Previously added) A method as recited in claim 18 wherein in said mixing step silica powder is further mixed with said zeolite and said acid silica sol.

20. (Previously added) A method as recited in claim 19 wherein said zeolite is a metallosilicate.

21. (Previously added) A method as recited in claim 20 wherein said amine compound is a compound having the general formula of $R^1R^2R^3N$ wherein R^1 , R^2 , and R^3 are each either hydrogen or an alkyl group having 1 to 6 carbon atoms.

22. (Previously added) A method as recited in claim 21 wherein said acid silica sol is a colloidal silica having a pH lower than 7.

23. (Previously added) A method as recited in claim 22, further comprising:
extruding said extrudable mass to form an extrudate;
drying said extrudate to form a dried extrudate; and
calcining said dried extrudate to form a catalyst.

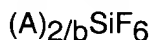
24. (Previously added) A method as recited in claim 23 wherein said catalyst comprises said zeolite and a low acid refractory oxide binder which is essentially free of aluminum.

25. (Previously added) A method as recited in claim 24, wherein the zeolite content of said catalyst, on a dried basis, is below 50 weight percent of said catalyst.



26. (New) A composition, comprising:
an extrudable mass having a pH above 8 and formed by adding an amine compound to a homogeneous mixture having a pH below 7 and comprising an acid silica sol and a zeolite.
27. (New) A composition as recited in claim 26 wherein said extrudable mass has a water content not exceeding 60 percent.
28. (New) A composition as recited in claim 27 wherein the zeolite content, on a dry basis, is below 50 wt% of said composition.
29. (New) A composition as recited in claim 28 wherein said acid silica sol is silica.
30. (New) A composition as recited in claim 29 wherein said amine compound is ammonia.
31. (New) A composition as recited in claim 30 wherein said zeolite is selected from the group consisting of ZSM-5, ZSM-12, ZSM-22, ZSM-23, and SZZ-32.
32. (New) A composition as recited in claim 31 wherein said amine compound is a compound having the general formula of $R^1R^2R^3N$ wherein R^1 , R^2 , and R^3 are each either hydrogen or an alkyl group having 1 to 6 carbon atoms.
33. (New) A composition, comprising:
a calcined extrudate of an extrudable mass having a pH above 8 and formed by adding an amine compound to a homogeneous mixture having a pH below 7 and comprising an acid silica sol and a zeolite.
34. (New) A composition as recited in claim 33 wherein said extrudable mass has a water content not exceeding 60 percent.
35. (New) A composition as recited in claim 34 wherein the zeolite content, on a dry basis, is below 50 wt% of said composition.
36. (New) A composition as recited in claim 35 wherein said acid silica sol is silica.
37. (New) A composition as recited in claim 36 wherein said amine compound is ammonia.
38. (New) A composition as recited in claim 37 wherein said zeolite is selected from the group consisting of ZSM-5, ZSM-12, ZSM-22, ZSM-23, and SZZ-32.
39. (New) A composition as recited in claim 38 wherein said amine compound is a compound having the general formula of $R^1R^2R^3N$ wherein R^1 , R^2 , and R^3 are each either hydrogen or an alkyl group having 1 to 6 carbon atoms.
40. (New) A composition, comprising:
a calcined extrudate of an extrudable mass having a pH above 8 and formed by adding an amine compound to a homogeneous mixture having a pH below 7 and comprising an

acid silica sol and a zeolite, wherein said calcined extrudate has been treated with an aqueous solution of a fluorosilicate salt wherein the fluorosilicate salt is represented by the formula:



wherein A is a metallic or non-metallic cation other than H⁺ having the valence b.

41. (New) A composition as recited in claim 33 wherein said extrudable mass has a water content not exceeding 60 percent.

42. (New) A composition as recited in claim 34 wherein the zeolite content, on a dry basis, is below 50 wt% of said composition.

43. (New) A composition as recited in claim 35 wherein said acid silica sol is silica.

44. (New) A composition as recited in claim 36 wherein said amine compound is ammonia.

45. (New) A composition as recited in claim 37 wherein said zeolite is selected from the group consisting of ZSM-5, ZSM-12, ZSM-22, ZSM-23, and SZZ-32.

46. (New) A composition as recited in claim 38 wherein said amine compound is a compound having the general formula of R¹R²R³N wherein R¹, R², and R³ are each either hydrogen or an alkyl group having 1 to 6 carbon atoms.

47. (New) A process comprising:
contacting under suitable process conditions a hydrocarbon feedstock with the composition of claim 26.

48. (New) A process, comprising:
contacting under suitable process conditions a hydrocarbon feedstock with the composition of claim 33.

49. (New) A process, comprising:
contacting under suitable process conditions a hydrocarbon feedstock with the composition of claim 40.